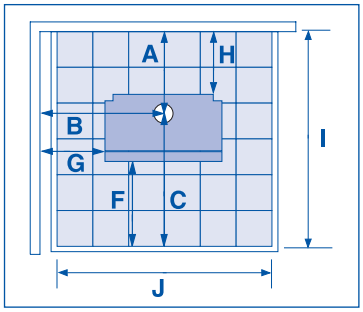
Wood Fire Installation & Owner's Operation Manual



metrofires

ECO Smart Insert

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NZHHA New Zealand Home Heating Association Inc.

NEW ZEALAND MADE

PIONEER MANUFACTURING LIMITED

PO Box 11, Inglewood 4347, New Zealand
Ph (06) 756 6520 • Fax (06) 756 6540
info@metrofires.co.nz • www.metrofires.co.nz

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⚠ WARNING! Important Information

- **WE HIGHLY RECOMMEND YOU READ THIS ENTIRE MANUAL AS INCORRECT OPERATION, MISUSE AND/OR LACK OF MAINTENANCE WILL VOID THE WARRANTY**
- **The appliance and flue-system shall be installed in accordance with AS/NZS2918 and the appropriate requirements of the relevant building code or codes**
- **Any modification of the appliance that has not been approved in writing by the testing authority is considered to be in breach of the approval granted for compliance with AS/NZS4013 and will void the warranty**
- **The appliance must be installed correctly. We recommend a competent and suitably qualified NZHHA installer**

⚠ CAUTION! Important Information

- **Mixing of appliance or flue-system components from different sources or modifying the dimensional specification or components may result in hazardous conditions. Where such action is considered, the manufacturer should be consulted in the first instance**
- **Do not install a Metro fire if there is any sign of visible damage to the product**
- **This appliance must be regularly maintained.**
- **Use authorised Metro replacement parts only. The use of unauthorised parts may void the warranty**
- **This manual must be left with the home owner**

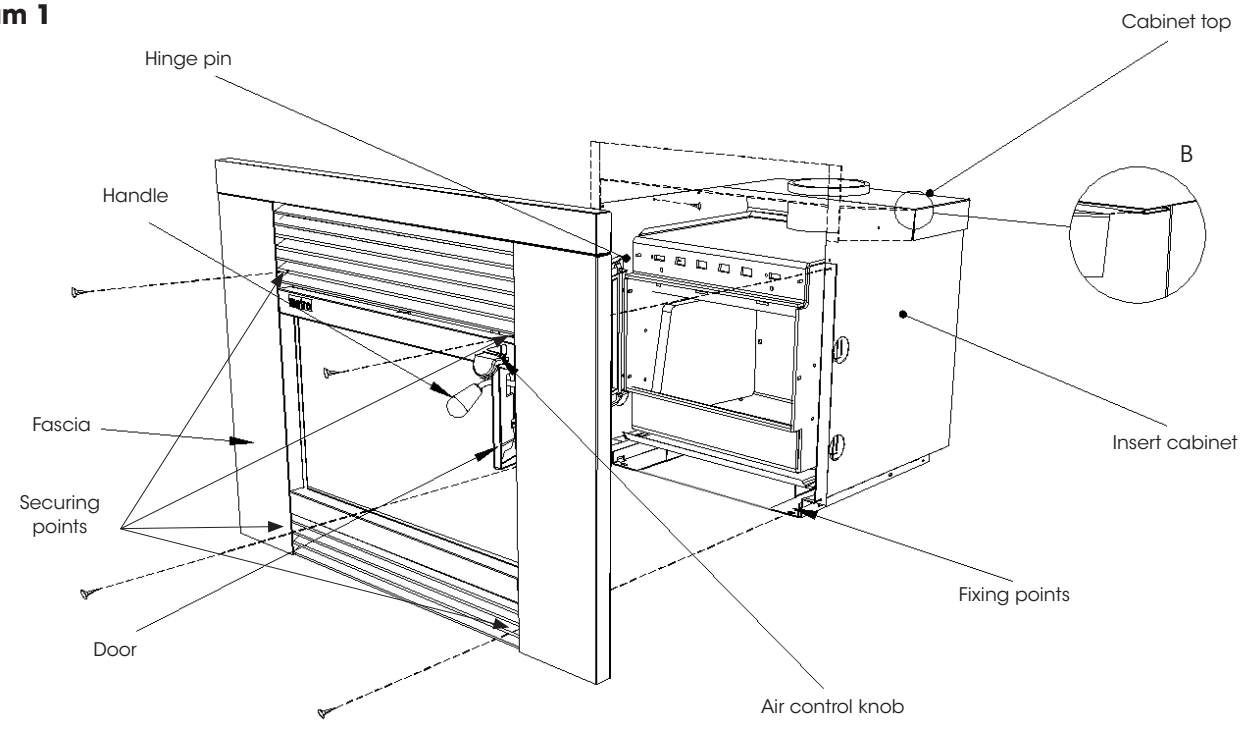
This Metro wood fire has been tested to and complies with AS/NZS2918:2001 when installed in accordance with this manual. Please ensure you are fully conversant with this relevant standard and the contents of this manual. Correct installation is critical to the safe operation and performance of this wood fire.

Please take particular note of the following:

- It is recommended that Metro's be installed with a Metro ECO flue system which has been developed to enhance the performance of Metro wood fires. Any alternative flue system must have a minimum flue pipe length of 4.2 metres of 150mm diameter flue pipe & have been tested to AS/NZS2918:2001.
- The 150mm flue pipe must be fully encased to the underneath of the flashing cone, from above the chimney breast. (there must not be any 150mm flue pipe exposed).
- All flue joints must be sealed and riveted in three points with stainless steel or monel rivets; the bottom of the flue in particular MUST be fully sealed into the flue outlet of the Metro wood fire and secured with the bolt & nut as supplied in the component kit.
- Ensure a fibreglass seal is placed between the outer cabinet and the masonry to prevent air from within the room being drawn into the chimney cavity.
- In New Zealand, the Metro Smart Insert must be bolted securely to the base of the chimney cavity to comply with the seismic restraint provisions of AS/NZS2918.2001.
- The Metro fascia is coated in either vitreous enamel or stovebright high temperature paint. Take care during assembly and when lifting or fitting the fascia that you do not damage this coating. Do not lift the Metro fascia with your fingers under the louvre's.

Assembling your Metro wood fire

Diagram 1



Assembling your Metro wood fire

All Metro Insert wood fires are packed in two heavy-duty cartons. The ECO Smart Insert firebox is supplied in a heavy duty palletised carton, this carton is clearly labelled. The fascia and door are packaged inside a smaller separate carton, again this carton is clearly labelled to show the colour of the fascia and door. Metro ECO Smart fascia's are coated in one of three coatings, being vitreous enamel, stovebright high temperature paint and high temperature aluminised silver. Having removed the packaging and located this manual, familiarise yourself with the illustrations on page 2 & 3, and proceed as detailed below.

Metro ECO Smart Insert

The ECO Smart Insert firebox is supplied in a heavy duty carton and is secured to a timber pallet. Having removed the cardboard, timber and polystyrene packaging and familiarised yourself with Diagram 1 on page 2, proceed as follows:

- Remove from within the firebox the plastic bag containing the component kit, two firebricks wrapped in a cardboard wrapper and the top baffle assembly.
- A "spacer" washer has been pre-fitted and taped to the top door hinge pin on the left hand side of the firebox, remove this tape.
- Take the door you previously removed from the fascia. Taking the door in both hands with the handle end in your right hand and outer face of the door facing you, attach the door to the firebox as follows: -

- With the door in a 90 degrees open position, allow the lower hinge pin on the bottom left hand side of the firebox to pass into the hole provided in the bottom of the door frame.
- Lift the door until the top of the door frame passes over the top hinge pin, then align the hole provided on the top face of the door frame and lower it down over the top hinge pin.
- Take the door handle from the plastic bag and screw it onto the door spindle by turning it clockwise.

- Unwrap the two firebricks from the cardboard wrapper and fit the side bricks to each side of the firebox. Location lugs are fitted to the base and rear of the firebox to retain the side bricks in position, refer Diagram 2 this page.
- Remove the "cabinet top" which is packed inverted on top of the firebox and fit it into position "over" the cabinet sides as detailed in Diagram 1. Ensure the rear edge is fitted correctly as shown Diagram 1, Inset "B", the rear edge of the cabinet top must fit "into" the slot provided. Using four of the short self tapping screws from the plastic bag, secure the cabinet top in place. Note, this panel can be fitted at two height's, if the height of the fireplace opening will allow fit the cabinet top in the higher position, fit screws from "inside" the cabinet facing out.
- Ensure the insulating blanket is in position on the top of the cabinet
- Remove the four speed clips from the plastic bag and fit them to the holes provided in the four tabs located in the front of the cabinet.

Pre Installation

Prior to installing your Metro fireplace insert into a fireplace cavity, it is important that certain clearances and other requirements are complied with as detailed below :-.

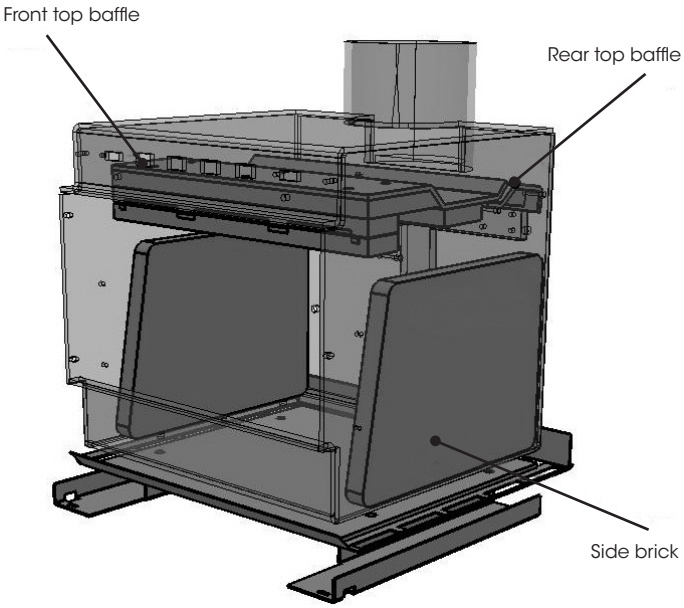
Fireplace Cavity

The chimney must be swept. Also: -

- Check for cracks and general overall condition. If repairs are necessary, they must be carried out by a suitably qualified person.
- Check the cavity dimensions to ensure the fireplace insert will fit. It is usually necessary to remove the fire bricks from the lower fireplace cavity.
- The base of the fireplace cavity on which the Metro fireplace insert will rest must be level. If it is not, it should be levelled using mortar.
- If a timber or combustible mantelshelf exists above the fireplace opening, it should be a minimum distance above the top of the Metro's fascia. Minimum distance is 475mm.

If less than the above minimum specified, a deflector or heat shield will be required to be fitted under the mantelshelf.

Diagram 2

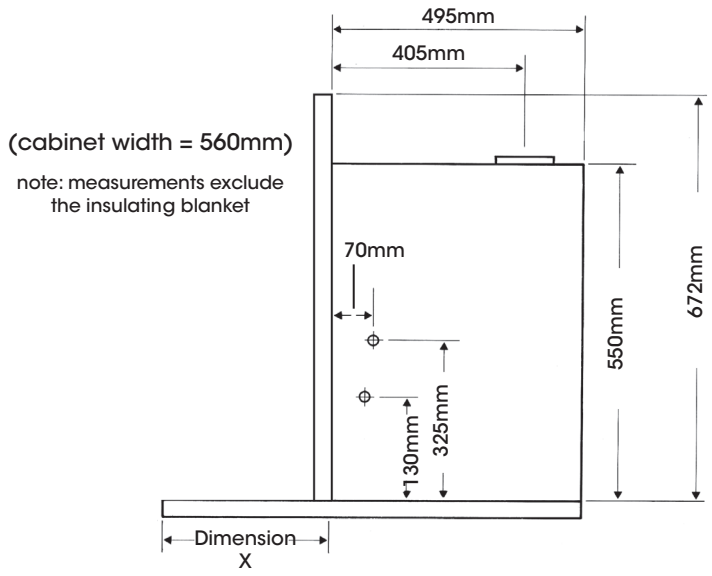


Floor protector requirements

Metro fireplace inserts are designed to be installed directly onto a concrete base. An insulating floor protector is required to project in front of the Metro and must extend a minimum of 200mm to each side of the door opening making the minimum floor protector width 825mm. The minimum floor protector projection forward of the cavity wall is illustrated in the key below. The floor protector construction must be a minimum thickness of 26mm Eterpan, or alternative insulating material of equivalent insulation properties, to achieve the minimum insulation required. Finish with a non combustible tile or similar.

Floor Protector Requirements					
Height (Floor Protector)	0mm	10mm	20mm	30mm	40mm
Dimension X	395mm	371mm	353mm	332mm	312mm

Fascia	Width	Height
ECO Smart Insert Fascia	890mm	672mm



Installing your Metro

Position the Metro ECO Smart Insert which is still attached to its wooden pallet directly in front of the fireplace cavity with the rear of the insert facing the fireplace opening. The fireplace insert assembly is bolted to the wooden pallet through its base panel at two points being each front corner. Remove both screws and slide the insert into the fireplace cavity taking care not to mark the floor protector. Discard the pallet.

1. Attach the fascia with the four longer screws that were supplied in the plastic bag taking care that the air control lever passes through the slot provided in the fascia. Centralise and level the fascia on the fireplace insert door and secure the four screws.
2. Applying pressure to the door or inside the fireplace firebox (not the fascia) carefully manoeuvre the Metro until the rear of the fascia is just touching the front face of the fireplace surround. Taking care not to move the fireplace insert, remove the fascia and mark the position of the fireplace insert onto the fireplace base.
3. Using a masonry drill, drill into the chimney base through the two slots which the fireplace insert was secured to the pallet through, check to ensure the fireplace insert hasn't moved and secure using suitable masonry anchors to comply with the seismic restraint provisions of the standard.
4. Remove the top baffle from inside the fireplace insert and the removable cabinet top. Check that the flue stub of the fireplace insert is in line by looking down the chimney, if not a stainless steel offset or flexi flue will be required.
5. Following the instruction sheet supplied with the flue system, proceed and fit the flue with all joints sealed and riveted with a minimum of three stainless steel or monel rivets on each joint.
6. With the flue pipe in position and sealed with a high temperature fire cement into the flue stub, drill through the hole provided in the front of the flue stub into the stainless steel flue pipe and secure with the 6mm bolt and nut supplied in the plastic bag.
7. Refit the top baffle into the firebox's upper chamber. Reposition the removable cabinet top ensuring it is correctly fitting as detailed on page 2 and secure in its upper position if possible. Note, if the adjustable height top can be raised slightly but not fully to its upper position, additional holes should be drilled to enable the top to be raised to this level.
8. Using a suitable rated insulation (fibretex 450 or similar) pack any gap that exists between the sides and top of the fireplace insert cabinet and fireplace surround.

- Do NOT block off the lower convection slots in the base of the outer wrap (all three sides).

9. Re-attach the fascia, centralise and level with the door and ensure the air control is moving freely and secure all four screws.
10. Locate the air control knob which is included in the plastic bag and carefully work it onto the air control lever.

The Metro is now fully installed and ready for operation but it is preferable to defer lighting the fire for a day or two if possible to allow sealant used in the flue pipe joints to air dry. Alternatively it is recommended you burn 2-3 sheets of loosely crumpled newspaper at a time, approx once every hour over a 6-8 hour period.

Metro ECO Smart Insert water heater

The ECO Smart Insert water heater comes fully assembled and is designed to be fitted to the "outside face" of either the left or right hand side of the firebox. Note – The hot water output of this water heating device is dependent on correct installation and the proximity of the ECO Smart Insert to the hot water storage cylinder;

- The closer the ECO Smart Insert is to the hot water storage cylinder, the greater the hot water production will be, and generally distances over 3 metres are not recommended.
- The "return" hot water connection copper pipe must be insulated and have a "Minimum" rise of 1 in 12 along its entire length. 1 in 12 is minimum and the greater the rise the better the performance.
- The return hot water pipe must be connected to the riser pipe connection in the base of the hot water storage cylinder.

INSTALLATION - Fitting the water heater is best performed prior to installing the Insert into the fireplace cavity.

1. Remove the fascia (if fitted), then on the side of the firebox to which the water heater is to be fitted, remove the angle cover plate from the inside face of the outer cabinet. Also, remove the fire brick on the wetback side from inside the fire box.
2. Having removed this cover plate the front face of the inner wrap is exposed. Fold the front face of the inner wrap outwards so it is parallel with the outer cabinet. This is needed to create access for the water heater to fit between the firebox and the inner wrap.
3. Remove the two square knock out plates from the front face of the inner wrap to provide clearance for the two connection pipes when the return is folded back.
4. Remove the two 50mm diameter knock out plates from the outer cabinet.
5. With a long handled 10mm set spanner, reach in between the inner wrap and the firebox and loosen the nut on the rear Pozi drive screw which will be used to secure the water heater. Then unscrew from the inside and discard the 6mm nut as the screw will thread directly into the water heater casting. Repeat for the two front bolts but retain the nuts and washers.
6. Remove the water heater from it's box, which also contains a tube of fire cement. You will note a 6mm bolt and washer is fitted to one of the casting ribs, remove this.
7. Smear a "liberal but even" amount of Pioneer fire cement over the entire "flat face" of the water heater in order to ensure full surface contact with the outside face of the firebox.
8. Hold the hot water heater by the two copper pipes and slide the water heater between the inner wrap and the firebox until the pipes are vertical and in line with the two 50mm holes in the outer cabinet. The pipes will be tight against the outer cabinet as you do this, but the cabinet will flex enough to allow you to work the device until the pipes pass through the 2 x 50mm holes in the outer cabinet.
9. Re-fit one of the bolts previously removed (stage 5) from "inside the firebox" through one of the two slots provided in the front edge of the water heater casting, and loosely attach the washer and nut to the thread of the bolt.
10. Next pivot the water heater using the first bolt just refitted as a pivot point, and refit the rear pozi drive screw "from inside the firebox" into the rear "tapped" hole in the casting. Then refit the remaining front bolt and attach the washer and nut.
11. Fully tighten all three fastenings, and check to ensure the casting has pulled up evenly onto the side of the firebox. Excess fire cement should be visible around the entire perimeter of the casting.
12. Bend the front returns of the inner wrap back into place so it folds around the front of the water heater, then secure the inner wrap to the casting by refitting the 6mm bolt and washer previously removed at stage 6.
13. The water heater is now ready to have the copper pipe work attached for connection to the hot water storage cylinder (brazed joints are recommended)
14. Once all joints have been thoroughly checked and tested for leaks, refit the angle cover plate removed at stage 1, then align and refit the fascia. Both side bricks must be fitted inside the firebox.

ECO Smart Insert Water Heater

⚠ WARNING! Important Information

- **WE HIGHLY RECOMMEND YOU READ THIS ENTIRE MANUAL AS INCORRECT OPERATION, MISUSE AND/OR LACK OF MAINTENANCE WILL VOID THE WARRANTY**
- **Any modification of the appliance that has not been approved in writing by the testing authority is considered as breaching AS/NZS 4013 and will void the warranty**
- **Do not use flammable liquids or aerosols in the vicinity of this appliance when it is operating**
- **Do not dry clothes on or near this appliance**
- **Do not use flammable liquids or aerosols to start or rekindle the fire OR store fuel within the Metro's specified installation clearances**
- **Never operate your Metro with the door ajar, except on initial start up**
- **Open the air control fully before opening the Metro's door**

⚠ CAUTION! Important Information

- **This appliance should be maintained & operated at all times in accordance with this instruction manual**
- **This appliance should not be operated with cracked door glass, over worn, faulty or missing door seals**
- **Do not use driftwood, treated or unseasoned (wet) fuel, the use of most types of preservative treated wood as fuel can be hazardous and will damage your appliance**
- **Burning unseasoned (wet) fuel or incorrect operation on extended low burn cycles will cause excessive creosote to form. Creosote is very corrosive and excessive buildups will result in the flue pipe, flue spigot and upper burn chamber failing. Failure of the applicance and/ or flue system due to creosote damage is not covered under warranty. The formation of such is not an appliance issue it is a fuel and operational issue**
- **This appliance must be regularly maintained and replacement parts must be authorised Metro parts only**
- **Do not empty ash into a combustible container**

Congratulations on the purchase of your Metro wood fire

This low-emission, slow combustion appliance is designed to give you many years of warmth and service, subject to the following key factors. These key factors, if not adhered to are the major causes of unsafe installation, poor performance and flue blockages and potential product failure.

1. Your Metro wood fire must be installed correctly. Metro recommend a competent and suitably qualified NZHHA installer.
2. The only fuel to be used in this appliance shall be wood that meets the following criteria.
   - Less than 25% moisture content
   - Has not been treated with preservatives or impregnated with chemicals or glue,
   - Is not chipboard, particle board, or laminated board,
   - Is not painted, stained or oiled
   - Is not driftwood or other salt impregnated wood
3. The appliance shall be operated at all times in accordance with the "Installation and Operating Instructions" supplied with each appliance.
4. It is preferable that Metro wood fires should be installed with a Metro ECO Flue System.
5. Coal must not be used as a fuel.

Please also note the following important points:

- In New Zealand a building consent is required from your local building authority. The homeowner is responsible for obtaining this consent.
- As correct installation is critical to the performance and safe operation of your Metro, it is recommended your Metro be installed by a NZHHA registered installer or a person suitably qualified in the installation of wood fires. Your Metro retailer will be able to arrange professional installation for you.
- During the very first fire your Metro will give off an odour and fumes as the firebox paint cures. Do not be alarmed; open all windows and externally opening doors in that room and close any internally opening doors. This curing process will last for approximately one hour and is likely to happen this one time.
- Properly seasoned (dry) timber is necessary for the Metro to operate efficiently; firewood that contains a high moisture content will result in flue pipe blockages, reduce heat output and create other issues.

Note: Once split, Softwood usually takes 12 months to season - Hardwood can take up to 24 months to season - Wood must be stored in a location that enables air circulation. Unseasoned wood stored in a closed woodshed without air circulation will still be unseasoned 12 months later.

- It is critical that the fire not be operated with over worn, faulty or missing door seals. Door seals will harden over time and become over-worn (3-4 year's) this will cause air to leak into the fire, causing the appliance to 'over fire'.
- It is critical that the fire not be operated with over worn, faulty or missing bricks, baffle plate, baffle extension (white board on the baffle plate)
- It is critical that the fire not be operated with cracked, or broken door glass.

Please note, the above 3 points require regular inspection/ maintenance (every time the ash bed is cleaned out, generally 3-5 times a season) and if not maintained will void the firebox warranty. A glowing firebox or lower fluepipe is just one sign you are over firing your appliance. Please ensure you keep your proof of purchase/receipt on any parts you purchase.

- For optimum performance fuel must be loaded so the logs lay "front to rear" in preference to laying across the width of the firebox. Spaces should be left between the logs to enable oxygen to get to as much of the surface of the fuel as possible.
- A small hot fire loaded frequently is more efficient than a large fire burning on a low setting.
- Your Metro is covered by a full unconditional 12 month warranty on replacement parts, and a 10 year firebox warranty.

Where to install a Metro wood fire in your home

Wood fires are usually installed in the main living area, which is the section of the home that is usually kept the warmest, being the area in the home most frequently occupied. However, before deciding on the best location for your Metro wood fire you may wish to consider:

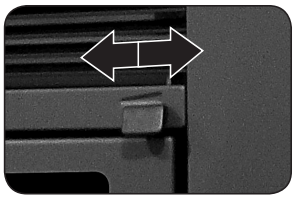
- Split level homes are best heated when the wood fire is installed on the lower level, as the heated air will rise to the higher levels.
- Building construction is another consideration. Specified clearances from walls, curtains etc must be maintained and you need to ensure no structural beams or internal gutters etc are directly above your preferred site. If you have a two storey dwelling you need to consider the second storey to ensure you don't have the flue directly outside a second storey window.

Generally, you can install your Metro in your home anywhere that suits you; Pioneer offer various fan systems to transfer heat to other sections of the home that are not heated sufficiently. It is necessary if using a fan system that the Metro you have purchased has sufficient output to heat the total area you wish to heat. Your Metro retailer or installer will be able to advise if you are uncertain.

Getting to know your Metro wood fire

Operating your Metro wood fire is simple and you will quickly learn how to get the best from it. First take a minute to familiarise yourself with your new Metro:-

- Raise the door handle anticlockwise until the latch releases, then slowly pull the door open. Load fuel and then close the door ensuring the latch is secure. Never operate with the door open or not latched securely.
- There is a single air control making your Metro easy to adjust. This control moves from left to right, which is "low to high".



Metro insert air control

All Metro inserts have an air control knob located directly above and to the right of the door. Slide this control knob gently from right to left until you reach a stop, this is a preset " low" position.

Operating your Metro wood fire

If your Metro has only been installed within the past few days, the fire cement seal at the base of the flue will not be fully cured. To ensure the cement sets without blistering it is recommended you burn 2-3 sheets of loosely crumpled newspaper at a time, approximately once every hour over a 6-8 hour period.

During the very first fire your Metro will give off an odour and fumes as the firebox paint cures. Do not be alarmed. Open all windows and externally opening doors in that room and close any internally opening doors. This curing process will last for approximately one hour and is likely to happen this one time.

Start up

Place a quantity of loosely crumpled newspaper on the base of the firebox until it is approximately 50% full of paper, or place firelighters on the base of the firebox. Add dry kindling and move the air control knob fully to the right, being the "full open" position.

Light the paper at two or three locations across the front of the door opening and leave the door slightly ajar resting on the latch pin if necessary for a few minutes while the fire establishes. Once the kindling is burning well, open the door and add 2-3 small logs at a time until you have a well-established fire. Usually this will take approximately 30 minutes, during which time the air control should be set on "high" and the door should be closed, except for the initial few minutes and when fuel is being added.

Normal operation

Once the fire is well established, regulate the air control to achieve the desired burn rate and heat output. As you move the air control to the right, burn rate, firebox temperature and heat output will increase, if you move the control to the left they will decrease.
Please note:

- Always open the air control fully prior to opening the door, then open the door slowly.
- When loading logs, place them end-on, "front to back"; air spaces should be left between the logs to enable oxygen to get to as much of the surface of the fuel as possible.
- Every time you refuel, leave the air control on "high" for a minimum of 20-25 minutes.
- Never use the door to force wood into the firebox, as this is likely to break the glass.

Cleaning and maintenance for your Metro wood fire

Metro fascia

The front panelling of your Metro ECO Smart Insert will be coated with one of two coating systems, which can be cleaned with a damp cloth when the Metro is not operating. The two alternative coating systems used on Metro ECO Smart fascias are: -

- Vitreous enamel which is extremely durable and designed to last the life of the appliance. As vitreous enamel is glass, a solid or heavy object dropped or banged against a panel could chip the enamel surface.
- High temperature paint finish which will require periodic repainting to keep it looking its best. This coating is not as durable as vitreous enamel and is susceptible to scratching, so care is required. Fascias coated with high temperature paint can be easily resprayed using Pioneer metallic black paint.
- This appliance must be regularly maintained and replacement parts must be authorised Metro parts only.

Door glass

Providing your fuel is properly seasoned, under normal operating conditions the air-wash design of the Metro's firebox will keep the door glass clear. If the glass requires cleaning you may use either a razor blade scraper or an oven cleaner.

If your door glass breaks it must be replaced with 5mm thick ceramic glass which is available from your local Metro retailer.

Door seals

Over time, usually 3-4 years, the door and glass seals will become hard and cause air to leak into the firebox, causing the appliance to 'over fire'. Your Metro retailer stocks replacement woven fibreglass door and glass seals, which need replacing when they become hard and over worn.

The door of your Metro is easily removed. Hold it in both hands and lift the hinge end of the door up and over the top hinge pin, then lower the door from the bottom hinge pin.

Side bricks

Hair-line cracks are not uncommon and are a result of the intense heat within the Metro's firebox, coupled with mechanical damage caused by accidental impact when fuel is being loaded. However if the side bricks become cracked to the extent that they start to break up, they must be replaced.

Door adjustment

Provision is available on both sides of the door for adjustment.

To adjust the hinge end of the door, open the door fully, loosen the top hinge nut and slightly lift the latch end of the door; you will see the hinge assembly move back 1-2mm which will usually be sufficient. Retighten, then repeat by loosening the lower hinge nut, this time applying a slight downwards pressure onto the door to move the lower hinge assembly back a similar distance, then retighten.

The door latch is also adjustable, as the latch pin on the right side of the firebox is fitted through a slot which enables the latch pin to be loosened, moved back and re-tightened.

Ash removal

Over a period of time ash will build up in the base of the Metro's firebox and require removal. The time this build-up takes depends on the density and cleanliness of your fuel.

To remove the excess ash your Metro should not be operating.

- Open the door, and using a hearth shovel or similar, empty the excess ash directly into a steel or non-combustible container.
- If the ash is not disposed of immediately, be careful where you store it, as the ash can retain heat for many days and become a fire hazard.
- You must leave a bed of ash in the base of the firebox approximately 10mm deep; this insulates the base of the firebox and improves combustion.

Top baffle

Your Metro ECO Smart Insert has a secondary burn chamber which enables it to operate at very high efficiency's. This secondary burn chamber is created by the top baffle which is illustrated on the reverse side of this manual.

This is a 'sacrificial' wear part of the firebox and should be checked monthly. Usually only the "Promet" (white board) front/underneath section needs to be replaced when it starts to disintegrate.

To remove and replace your Metro's top baffle, proceed as follows: -

- Open the Metro's door fully, reach inside with the palm of your hand face up and extended, lift the top baffle approximately 20mm, then lift it forward out through the door opening placing it on a sheet of newspaper you have placed on the front of the hearth. Please Note: -
- Your Metro ECO Smart Insert has a two part baffle as illustrated on page 3. The rear baffle section also lifts "up and out" the same as the front baffle.
- To refit the top baffle. Proceed in the reverse order and note, the baffle must be fitted so its rear is touching the back of the firebox.

Note: Cracks in the promet are not uncommon and have no adverse effect on the operation of your Metro. These cracks are the result of intense heat coupled with expansion and contraction. Burning wood which is not properly seasoned, i.e. 25% moisture content or more, will over time cause the promet to disintegrate and require replacement.

Flue systems

Should be checked annually, particularly the bottom end of the lower flue section at its rear lock formed joint. If deterioration is noticed contact your Metro retailer or installer.

The flue pipe should also be swept a minimum of once a year, or as required during the winter season. If smoke enters the room when you open the Metro's door this usually indicates the flue pipe is becoming restricted and needs cleaning. The frequency of flue pipe cleans depends on many factors, with the main variables being:

Cleaning and maintenance for your Metro wood fire

- The seasoning of the wood. If not properly seasoned you will require frequent flue pipe cleans.
- The density of the wood. Softwoods generally result in more deposits building up in the flue pipe.

To clean the flue pipe of your Metro, proceed as follows:-

- Open the Metro's door fully, reach inside with the palm of your hand face-up and extended, lift the top baffle approximately 20mm, then lift it forward out through the door opening, placing it on a sheet of newspaper you have placed on the front of the floor protector.

  Note: Some appliances have a two piece top baffle.
- Close the door and slide the air control to the left.
- Once on the roof, remove the cowl from the top of flue system and sweep the flue pipe using a 150mm-diameter flue pipe brush as detailed in the instructions provided with the fluebrush.
- Once the flue pipe is clear, clean and refit the cowl. Remove the excess soot which has fallen into the firebox, leaving a layer of ash 10mm deep on the base of the firebox, then refit the top baffle.

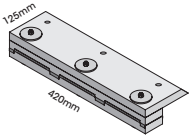
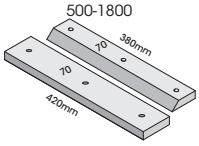
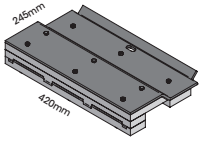
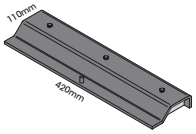
Note: The baffle must be fitted so its rear is touching the back of the firebox; if uncertain refer to page 3 in the installation section at the front of this manual, which shows illustrations of the baffle location.

Parts guide for your Metro – Baffle, promet and wetback

Listed below are the parts and product codes for your Metro wood fire. The promet/baffle should be regularly checked and must always be in place during the operation of your fire.

Note: Cracks in the promet are not uncommon and have no adverse effect on the operation of your Metro. These cracks are the result of intense heat coupled with expansion and contraction and is normal wear & tear.

Your Metro wood fire must be regularly maintained and we recommended it is also serviced annually. If a wood fire is not regularly maintained and serviced, the life span will be reduced. If your Metro wood fire has been neglected, by not being regularly maintained and serviced, with authorised Metro parts replaced as required, your warranty may be declined.

Clean air model	**Type of promet required / Type of steel baffle(s) required**				**Water heating options**
	ECO Smart Front 500-1675	ECO Smart Ctr-Rear Set 500-1800	ECO Smart Front 500-2350	ECO Smart Rear 500-2400	ECO Smart Booster 450-0350
• **Smart Insert**					

Troubleshooting your Metro wood fire

If your Metro is installed correctly, your fuel is dry and you operate your fire correctly, you will find it to be a pleasure to use. Metro's many years of experience within the wood heating industry has shown that dissatisfaction is mainly due to:

- unseasoned fuel
- faulty installation
- operational error
- or a combination of the above 3 points.

The following may be of assistance if you are experiencing any of these problems.

SMOKE ENTERS THE ROOM WHEN THE METRO'S DOOR IS AJAR (Possible reasons and solutions)

Check flue pipe joins:

If the flue pipe joins are not sealed correctly, the flue pipe will not draw as well as it should. The flue pipe join connecting into the flue spigot on top of the Metro is most critical, if this is not sealed correctly, smoke will enter the room when the door is ajar. To check this join is sealed correctly, run a match or lighter flame around the join. If the flame is sucked into the spigot then it is not sealed correctly. This check needs to be done when the fire is not going. Ensure you check the rear of the flue pipe/ spigot join, as due to the seam in the flue pipe, this is the most common area for not being sealed correctly.

Ensure the fuel you are using is correctly seasoned:

If you are burning unseasoned fuel (wet), the fire will cause nothing but problems. The Metro won't deliver much heat, it will be lazy, smoke will enter the room when the door is ajar, and the door glass will run black. Unseasoned fuel is the main contributor to excessive creosote deposits which can be corrosive to your appliance and flue system.

Flue pipe length is too short:

Add more flue pipe as the longer the flue system, the better the draw of the flue pipe. Please note, if you did not purchase the Metro ECO Flue System, you will not have the ECO Cowl which increases draw. We highly recommend the Metro ECO Cowl is fitted as this will increase the draw. If you already have an ECO Cowl and smoke is still entering the room, please add another 600mm length of flue pipe.

Downdraft:

If you have checked all of the above and the fire is still smoking into the room, it's possible there may be a down draft issue. Down draft is environmental and can be caused by many variables, and it is purely trial and error to ascertain the cause. Solutions may be:

- 'H' Cowl, designed purely for downdraft issues, but if you have an ECO Cowl fitted as standard, you will also need to add another 600mm of flue pipe to compensate as the H Cowl is shorter in length.
- Directional Cowl, designed for high wind areas.

Air control setting:

Ensure the air control setting is on high before opening the door to reload, as this increases the draw up the flue pipe. Open the door slowly.

If your Metro did not smoke, but its starting too and is getting worse:

The flue pipe is in need of a clean. It is recommended that the flue pipe be cleaned every season, however if you are burning the fire on low a lot, or are using unseasoned fuel, flue pipe cleans will be required more frequently.

Correct operation:

Modern day wood fires need to be operated hard and fast, more so than low and lazy to ensure the firebox and flue pipe runs hot and efficiently. If the fire and flue pipe is up to temperature it will perform extremely well, the smoke will draw up the flue pipe with ease, and the fire will produce good amounts of heat.

If the fire is operated on low a lot of the time, the door glass will run black, the flue pipe will tend to block up more frequently and the fire will end up smoking into the room when reloading. It's better to have a small fire running hard and fast, rather than a big fire running low and lazy.

OTHER ISSUES YOU MAY EXPERIENCE

I can smell smoke in the room after a low burn cycle:

The smell is creosote that will be seeping through the flue pipe join or out of the flue spigot onto an external surface, thus creating the smell in your room. The cause will be either unseasoned fuel, fuel mass too large, incorrect operation on low burn cycles or a combination. Creosote is very corrosive and excessive buildups will result in the flue pipe and potentially the flue spigot and upper burn chamber failing. The formation of excessive creosote is not an appliance issue, it is a fuel and operational issue. Failure of flue pipe or firebox due to creosote build up is not covered under warranty as excessive creosote build up is only possible from either unseasoned fuel or incorrect operation.

The Metro won't turn down as much as it did

The door itself may need readjusting, the hinge and latch is slotted and allows for movement. Loosening the hinge and moving it back a few mm will make the door seal tighter and stop air leaking into the fire. The door and glass seals may be in need of replacing, which is generally required every 3-4 years.

Familiarise yourself with the instructions on page 8 before proceeding with this maintenance.

Warranty details for your Metro wood fire

Metro wood fires are manufactured in New Zealand, using the highest quality of materials, workmanship and the latest manufacturing techniques, which is why we offer a full 10 year firebox warranty and 1 year parts warranty for peace of mind.

METRO WARRANTY
(NZ Consumer laws apply to this warranty)

Pioneer Manufacturing Limited (Pioneer) warrants the steel firebox against defective materials and workmanship which would render it unfit for normal domestic use, from the date of purchase by the original consumer, for a period of 10 years.

Components including panel coating, door retainers, door seals, glass, trim, baffle & bricks are warranted for a period of 1 year from the date of original purchase for normal domestic use against defective materials and workmanship.

All associated accessories including, but not limited to, fans, flue systems, flue shields, wetbacks, tool sets, ash pots etc, are covered by a 1 year warranty against defective materials and workmanship.

It is recommended, but not a condition of this warranty, that a full service/inspection of the Metro wood fire be carried out at the end of each winter season.

Warranty Conditions:

- The Metro wood fire must be installed, operated and maintained strictly in accordance with the building code and this installation and operation manual.
- The Metro wood fire must be installed and used in a domestic application.
- This warranty covers appliance like for like replacement or repair at the manufacturer's discretion but excludes freight, travel, installation, labour and/or any other associated costs.
- Pioneer or their agents are not liable for any loss or expense direct or indirect arising from the failure of any part or operation of the appliance.
- Operation of this appliance in violation of the warnings in this operation and installation manual will void this warranty.
- Your Metro wood fire must be regularly maintained and we recommended it is also serviced annually. Proof of servicing may be required. If a wood fire is not regularly maintained and serviced, the life span will be reduced. If your Metro wood fire has been neglected, by not being regularly maintained and serviced, warranty may be declined.
- It is critical that the fire not be operated with over worn, faulty or missing door seals. Door seals will harden over time and become over-worn (3-4 year's) this will cause air to leak into the fire, causing the appliance to 'over fire'.
- It is critical that the fire not be operated with over worn, faulty or missing bricks, baffle plate or baffle extension (white board on or under the baffle plate)
- It is critical that the fire not be operated with cracked, or broken door glass.

⚠ IMPORTANT INFORMATION

Note: The above 3 points require regular inspection/ maintenance (every time the ash bed is cleaned out, generally 3-5 times a season) and if not maintained will void the firebox warranty. Please ensure you keep your proof of purchase/receipt on any parts you buy.

- A claim under this warranty should be directed to the retailer who supplied the Metro wood fire. If this is not possible write directly to the manufacturer stating details of fault, model and serial number of your Metro, date and proof of purchase and name of retailer where the Metro was purchased.

Warranty Exclusions:
This manufacturer's warranty does not cover:

- Service calls which are not related to any defect in the product (i.e. operational, installation or fuel issues). The cost of a service call will be charged if the problem is not found to be a product fault.
- Defects caused by factors other than normal domestic use or use in accordance with the product's operation manual.
- Defects caused through the product being operated in an "over-fired" manner resulting in sections of the firebox operating excessively hot to the point that sections glow red. (Note – This will result in distortion of the firebox)
- Defects to the product caused by accident, neglect, misuse or act of God.
- The cost of repairs carried out by non-authorised repairers or the cost of correcting such unauthorised repairs.
- Required maintenance as set out in this manual.

Service under this manufacturer's warranty must be provided by a repairer authorised by Pioneer Manufacturing Ltd. Such service shall be provided during normal business hours.

⚠ WARNING! Complete and retain these details at time of purchase:

Purchase Date _____

Serial Number _____

Model _____

Colour _____

Retailer _____

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Metro Wood Fire Specifications

Metro have a Specifications Brochure available which details relevant compliance data for every model. This brochure is updated annually and details the minimum clearances and specifications for all models, which is generally required when applying for a building consent. See your Metro retailer to obtain a copy, or visit www.metrofires.co.nz

metrofires.co.nz

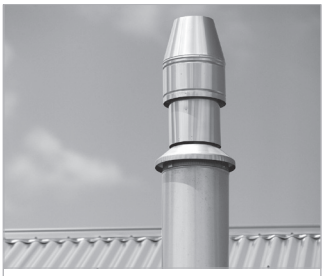
Visit the Metro website: www.metrofires.co.nz to view Metro's 'video demos' showing the latest in wood fire technology energy saving options. You can view the entire Metro product range, find out where your nearest Metro retailer is located or simply check out the latest specifications, installation requirements and emission and efficiency data for the Metro of your choice.

Pioneer heating accessories

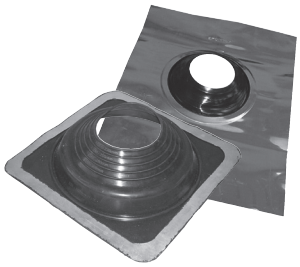
Metro Accessories

Metro offer a range of heating accessories designed to compliment your Metro wood fire. See below for some of the products within our heating accessory range.

This range of accessories includes floor protectors, heat transfer systems, child guards, baffles, bricks and more. For further details ask your Metro retailer for a copy of the Metro heating accessories brochure, or visit www.metrofires.co.nz



ECO Flue Systems



Flashrites and Versatiles

Wetbacks

High Temperature Paint

Child Guards

Heat Transfer Systems

Universal Door Seal Kits

Fire Cement And Silicone

Corner and Wall Floor Protectors

Glass Tape

Door Seal Rope

Chubb Smoke Detectors